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(12) United States Patent

Ueda et al.

(54) COMPUTER-READABLE NON-TRANSITORY STORAGE MEDIUM HAVING STORED THEREIN INFORMATION PROCESSING PROGRAM, INFORMATION PROCESSING METHOD, INFORMATION PROCESSING SYSTEM, AND INFORMATION PROCESSING APPARATUS

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(56) References Cited

U.S. PATENT DOCUMENTS

2003/0166413 A1 9/2003 Hayashida 2003/0216177 A1 9/2003 Aonuma et al. (Continued)

FOREIGN PATENT DOCUMENTS

EP	1132120	9/2001
JP	H0981772	3/1997
JP	2009-056181	3/2009

OTHER PUBLICATIONS

Search Report dated Apr. 10, 2018, issued in EP Patent Application No. 17204385.3 (6 pages).

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(57) ABSTRACT

A first image is generated by imaging a first three-dimensional virtual space including a predetermined object by a first virtual camera. In addition, a map object formed by a three-dimensional model corresponding to the first three-dimensional virtual space is generated, and an indicator object indicating the position of a predetermined object is placed on the map object. Then, a second image is generated by imaging the map object by a second virtual camera. At this time, the second image is generated such that, regarding the indicator object placed on the map object, the display manners of a part hidden by the map object and a part not (Continued)

